

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION**

**LATE ADDITION**

**ITEM NO. 5**

**MEETING OF FEBRUARY 14, 2013  
VARIOUS LOCATIONS  
(VIA TELECONFERENCE)**

**UNITED STATES FOREST SERVICE – LAKE TAHOE BASIN MANAGEMENT  
UNIT (LTBMU), UPPER TRUCKEE RIVER REACH FIVE (SUNSET STABLES)  
RESTORATION PROJECT, EXEMPTION TO WASTE DISCHARGE  
PROHIBITIONS CONTAINED IN THE WATER QUALITY CONTROL PLAN  
FOR THE LAHONTAN REGION, EL DORADO COUNTY**

\_\_\_\_\_ El Dorado County \_\_\_\_\_

The following are late additions to Item No. 5:

- 1) POWER POINT PRESENTATION FOR ITEM 5**
- 2) ENCLOSURE 4:** Response to Comments
- 3) ENCLOSURE 5:** Letter to the Board from LTBMU
- 4) ENCLOSURE 6:** Power Point Presentation from LTBMU

<b>ENCLOSURE</b>	<b>DESCRIPTION</b>	<b>BATES NO.</b>
<b>4</b>	Response to Comments	<b>5-47</b>
<b>5</b>	LTBMU's letter to the Board	<b>5-57</b>
<b>6</b>	LTBMU's Power Point Presentation to the Board	<b>5-61</b>
<b>7</b>	Proposal for additional post-project turbidity monitoring associated with the UTR Reach 5 Restoration Project	<b>5-69</b>



# **ENCLOSURE 4**

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## Scribe, Laurie@Waterboards

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**From:** Scribe, Laurie@Waterboards  
**Sent:** Monday, February 04, 2013 3:13 PM  
**To:** Hydroman (hydroman455@aol.com)  
**Cc:** Cushman, Douglas@Waterboards; Smith, Doug@Waterboards  
**Subject:** Response to Comments - UTR Reach 5 Restoration Project  
**Attachments:** Wigart Response 2-4-2013.pdf

February 4, 2013

Mr. Wigart,

The Regional Water Quality Control Board received your comment letter regarding the draft Resolution for the United States Forest Service-Lake Tahoe Basin Management Unit, Upper Truckee River Reach Five Restoration Project. Please find the attached response to your comments.

If you would like to receive a paper copy of the attachment, please provide a mailing address. If you have any additional questions or concerns please contact me at [Lscribe@waterboards.ca.gov](mailto:Lscribe@waterboards.ca.gov) or (530) 542-5465.

Laurie Scribe  
Environmental Scientist  
Lahontan Regional Water Quality Control Board  
2501 Lake Tahoe Blvd.  
South Lake Tahoe, CA 96150  
[Lscribe@waterboards.ca.gov](mailto:Lscribe@waterboards.ca.gov)  
(530) 542-5465



**Comment**

1/16/12

Laurie Scribe  
Environmental Scientist  
Lahontan Regional Water Quality Control Board  
2501 Lake Tahoe Blvd.  
South Lake Tahoe, CA 96150

Mrs. Scribe,

Re: Draft Resolution for the USFS – Upper Truckee River Reach 5 restoration – Exemption to Waste Discharge Prohibitions Contained in the Water Quality Control Plan for the Lahontan Region.

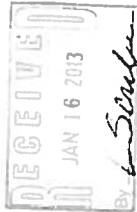
General Comments:

Since this project is mostly aimed at reconnecting the river to the floodplain it makes incredible sense to measure the project area during this peak runoff condition. Any project that is designed to mitigate a certain condition should be measured during the condition in which it is designed too, in this case any flow greater than ~350 cfs. The stability of the channel is not an issue during construction, therefore all water quality monitoring in this SWPPP is aimed at only measuring flushing during introduction of water into new channel or discharges during and actual storm event that is most likely not overbank. There is no peakflow to date that has occurred during the active construction season up to October 15.

Therefore this monitoring will not capture any discharges that occur during the peak condition of which this project is intended to mitigate for water quality or perhaps degrade. If mass transport of sediment occurs during this overbank (peakflow) condition then there is no way to assess (except for in stream surveys) the damage that has been done nor quantify the level of sediment discharge as a result of the projects construction. Construction discharges in this case include the entire calendar year until permit revocation.

Since the construction of this project is intended to be completed over 3 years, is active construction defined as the period from May 1 – October 15, until the permit is terminated? In this case any discharge (peakflow) that occurs on the site during the active construction season should be inspected and measured as long as the permit is open. Most winterization does not include long term stabilization but preventative measures to mitigate temporary erosion. These erosion control measures should be inspected outside the normal construction season and during Peak Flows.

{ Will visual monitoring be required post construction for a defined period? In the case of the downstream Airport Reach restoration project, the site was stabilized and the permit revoked within days of open channel grading and mass movement of soil within the floodplain (> 1 acre) past October 15. The following season the project had signs of very serious erosion (unmeasured) and had very apparent adaptive management that needed completion. Contractor trucks along with agency staff could be seen working within the active floodplain the following season that did not appear to be covered under an active construction permit and because the permit was terminated, the new project was now less than 1 acre. It appeared in the public eye that this project was piecemealed. This also



**Response**

**RW1:** The US Forest Service – Lake Tahoe Basin Management Unit (LTBMU) plans to complete the Project over four construction seasons. The Tahoe Construction General Permit, Order No. R6T-2001-0019 (Tahoe CGP), defines the “active construction season” as May 1-Oct 15, and prescribes specific storm water effluent and visual monitoring requirements for active and inactive seasons. The Tahoe CGP requires monthly visual monitoring during inactive seasons. These visual inspections will assess the adequacy of temporary winterization and erosion control practices.

The LTBMU will monitor Project area construction Best Management Practices (BMPs) daily during active construction periods in accordance with the submitted Storm Water Pollution Prevention Plan (SWPPP). The monitoring requirements for both active and inactive periods are intended to identify potential water quality problems and implement corrective measures as needed.

**RW2:** The Tahoe CGP requires that restoration projects submit a restoration monitoring plan as part of the SWPPP. The LTBMU has prepared an Effectiveness Monitoring Plan to comply with this requirement that includes visual monitoring for several years post construction. Visual observations will be made at and around the 375 cubic feet per second (cfs) design flow to determine the actual flow needed to overbank the new channel. The LTBMU will take photos to document these inspections.

**Comment**

appeared to circumvent the very same processes which govern the protection of Water Quality under the Clean Water Act. In the case of this project, the 401 certification was expired, so disturbance within the active floodplain did not appear to be covered under an ACOE general permit. So it appears that adaptive management of this project was completed within months of the projects termination (not Board under a legitimate permit. Again, in the eyes of the public, this does not appear to be in the protection of water quality. Informed citizens completed measurements of the peakflow a few months later and recorded large increases in turbidity downstream. This went unmeasured / uninspected by the project proponent and was overlooked by Water Board staff even with complaints being filed by individual citizens. A copy of the paper completed as a result of this effort is attached. This paper has been reviewed and commented on by several renowned industry professionals and geomorphologists. This level of water quality monitoring is very simple, easy to conduct and gives reliable insight into the success or benefit of the project. It was stated by Regional Board Staff in an article in Tahoe Daily Tribune "There's no way to directly measure the benefit or the harm of our actions" (link below). We simply do not believe that to be the case. Contrary to the article; the data the City collected as a result of concerned citizen's complaints, directly replicated the data collected by the citizen research. This level of monitoring is very simple to conduct and yields very reliable information.  
<http://www.tahoevalleytribune.com/article/20120428/ARCHIVES01/120429892>

Our experiences have indicated that Project Termination and / or revocation should not be granted until at a minimum (1-2 years) post construction. Adaptive management needed as a result of peak runoff during the spring will not be known until after final grading and a full season of runoff through the project site. Adaptive management will then require that this permit be re-opened or reissuance of a permit if its piecemealed. Attachment C.III.A.3 of the Tahoe Construction permit states "inspections shall be performed periodically, in accordance with this General Permit, from the commencement of construction activities until termination of coverage under this General Permit. The purpose of the inspections is to discover potential water quality problems at the construction site so the Discharger can implement corrective measures immediately. The inspections will also be used to document compliance with the conditions of the General Permit and the SWPPP and to evaluate the effectiveness of the SWPPP and the REAP." In this case, water quality problems as a result of construction activity may not be apparent until after the permit is revoked or terminated, therefore inspections are needed the subsequent year following construction to ensure that problems can be identified and corrective actions implemented immediately.

**SWPPP**

**Active Treatment System Plan...** The SWPPP calls for no active treatment system plan. Will dewatering activities be required to have any type of filtration system or ATS? The downstream Airport Reach was held to a high standard and required very intense dewatering mitigation. Why is this project being held to a different standard?

**Project Effectiveness Monitoring Plan**

**Objective 2C (increase floodplain sediment retention) -** The report states "While water quality sampling will not be carried out by the USGS staff in this channel outside the active construction periods, the USGS

**Response**

**RW3:** Termination of coverage under the permit will follow the procedures specified in Tahoe CGP Section II.E.

**RW4:** Regulatory approval for post-project adaptive management will be determined based on the extent of proposed work. The Upper Truckee River Sunset Stables Reach Environmental Assessment/Negative Declaration (UTR EA/ND) (Enrix, February 2012) acknowledges the need for adaptive management:

"A multi-agency Adaptive Management process has been established for UTR restoration projects. In line with this process, adaptive management will be conducted by the project proponents for the multiple UTR restoration projects. This will involve coordinated inspections of project areas after high flow events and spring runoff periods to identify any areas of erosion or other resource concerns. Inspections will continue annually for approximately 5 years after project completion in each restoration reach. A plan for how to address these problem areas will be determined under consultation with agency stakeholders and regulatory agencies to ensure that the problem will not become a chronic or recurring water quality impact." (UTREA/ND page 47)

Furthermore, the LTBMU's Effectiveness Monitoring Plan includes post-project visual observations to identify signs of bank erosion, bare soil areas vulnerable to erosion or flooding impacts, or other indicators of the potential for future resource damage. These observations will be used to determine if adaptive management actions are warranted to prevent a chronic or worsening trend in erosion or channel stability.



## Comment

appeared to circumvent the very same processes which govern the protection of Water Quality under the Clean Water Act. In the case of this project, the 401 certification was expired, so disturbance within the active floodplain did not appear to be covered under an ACOE general permit. So it appears that adaptive management of this project was completed within months of the projects termination (not requiring post construction inspections) and that most of the work was possibly unauthorized by the Board under a legitimate permit. Again, in the eyes of the public, this does not appear to be in the protection of water quality. Informed citizens completed measurements of the peakflow a few months later and recorded large increases in turbidity downstream. This went unmeasured / uninspected by the project proponent and was overlooked by Water Board staff even with complaints being filed by individual citizens. A copy of the paper completed as a result of this effort is attached. This paper has been reviewed and commented on by several renowned industry professionals and geomorphologists. This level of water quality monitoring is very simple, easy to conduct and gives reliable insight into the success or benefit of the project. It was stated by Regional Board Staff in an article in Tahoe Daily Tribune "There's no way to directly measure the benefit or the harm of our actions" (link below). We simply do not believe that to be the case. Contrary to the article; the data the City collected as a result of concerned citizen's complaints, directly replicated the data collected by the citizen research. This level of monitoring is very simple to conduct and yields very reliable information. <http://www.tahoe-dailytribune.com/article/70120428/ARCHIVES01/120429892>

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### SWPPP

Active Treatment System Plan... The SWPPP calls for no active treatment system plan. Will dewatering activities be required to have any type of filtration system or ATS? The downstream Airport Reach was held to a high standard and required very intense dewatering mitigation. Why is this project being held to a different standard?

### Project Effectiveness Monitoring Plan

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## Response

**RW5:** Water quality and regulatory standards for this and other restoration projects in the Lake Tahoe basin are consistent.

In contrast with the City of South Lake Tahoe's Upper Truckee River Restoration project, the LTBMU will not discharge dewatering fluids directly to surface water. As part of project planning, the LTBMU analyzed the expected dewatering flow volume and assessed the capacity of adjacent lands to infiltrate dewatering flows. Based on this analysis, the LTBMU plans to use extensive meadow and upland areas within the project boundary for disposal of dewatering flows. The LTBMU is also developing contingency measures in the event that the infiltration capacity of the meadow and upland areas is insufficient for dewatering needs, including but not limited to passive treatment (sand filters), active treatment (coagulants), disposal to the public utility, and off-site disposal.

**Comment**

currently operates gauging stations along the UTR located in South Lake Tahoe and upstream of Meyers in Christmas Valley”.

Comment: Although this sampling is aimed at capturing status and trends in the long term record, the sampling consists of approximately 25 samples per year and is not intended to capture inter event variability or individual storm events. In the event this project contributes to a large sediment discharge during a peak period (peak flow), there is no monitoring in place to record any water quality measurements which would indicate problems, excessive discharges or the need for adaptive management. Overbank floodplain deposition monitoring will be pointless if the banks in the project area are scoured out and deposited onto the adjacent floodplain. Water quality measurements are needed to ensure that discharges into the 303D listed water body (Lake Tahoe) are minimized, recorded and documented.

What happens if this project fails to meet its objectives and decreases most of the thresholds it seeks to improve? Who is held accountable and what plan is in place / resources to be able to fix it? Based on every stream project in the past that has been completed, adaptive management is a critical component. With all agency funding coming to an end, how can we be assured adaptive management will be applied in a timely and cost effective manner?

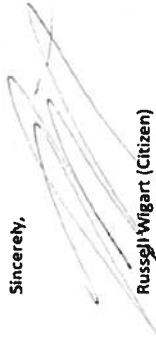
A citizen group (Friends of the Upper Truckee River) has been assembled in the local neighborhood that intends to watchdog this project, collect data and report to agencies and the press. Our sole request is that this river be monitored:

- 1.) During Peak conditions (>350 cfs) measured for turbidity and at a minimum measured for turbidity twice a day, above and below the restoration project.

UTR Video

<http://youtu.be/RsYNw31bGZY>

Sincerely,



Russell Wigart (Citizen)

Friends of the Upper Truckee River

Attachment: UTR\_draft\_LRWQCB

**Response**

FW6: Although water quality monitoring might help resource managers understand short term, localized river conditions, it is difficult to weigh those changes against the impact of existing instabilities and expected long-term restoration benefits.

The UTR EA/ND acknowledges there may be channel adjustments during the years immediately following project completion that could temporarily increase bank erosion rates. This temporary adjustment however will decrease over time as bank and floodplain treatments are fully established. In the Geology section, UTR EA/ND states:

“Diverting the UTR into the new channel would result in sediment transport of material in the channel and some adjustments of the banks, which is to be expected. Natural processes of erosion and sediment deposition would continue to act on the constructed channel, resulting in some extent of bank erosion and channel adjustments over time.” (UTR EA/ND page 137)

Short term water quality risks are further acknowledged in the Water Quality/Hydrology section:

“The Proposed Project also involves an inherent risk to water quality during the period following active construction. During a period of approximately 3-5 years following construction or until a large flow event occurs, the new channel will be slightly more susceptible to erosion during high flow events as the vegetation is still becoming fully established.” (UTR EA/ND page 168)

There is inherent uncertainty associated with large-scale channel restoration efforts. While the long-term goals include water quality enhancement by increasing overbank flow and addressing existing bank erosion and channel incision, some short term water quality impacts are expected.

**Comment**

**Response**

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Comment: Although this sampling is aimed at capturing status and trends in the long term record, the sampling consists of approximately 25 samples per year and is not intended to capture inter event variability or individual storm events. In the event this project contributes to a large sediment discharge during a peak period (peak flow), there is no monitoring in place to record any water quality measurements which would indicate problems, excessive discharges or the need for adaptive management. Overbank floodplain deposition monitoring will be pointless if the banks in the project area are scoured out and deposited onto the adjacent floodplain. Water quality measurements are needed to ensure that discharges into the 303D listed water body (Lake Tahoe) are minimized, recorded and documented.

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- 1.) During Peak conditions (>350 cfs) measured for turbidity and at a minimum measured for turbidity twice a day, above and below the restoration project.

UTR Video

<http://youtu.be/R5YNw31bG2Y>

Sincerely,

Russell Wigart (Citizen)

Friends of the Upper Truckee River

Attachment: UTR\_draft\_LRWQCB

*RW 6 (continued):* The need for adaptive management for previous projects on the UTR was established through visual observation, not water quality data. As described in response RW4 above, inspections are needed to facilitate problem area identification and support corrective action implementation. The project proposes several types of monitoring which will assess the needs for adaptive management, including visual and photo monitoring, bank stability surveys, and vegetation monitoring.

*RW 7:* The LTBMU is constructing this project to improve environmental conditions, and expects to help enhance several Environmental Thresholds as defined by the Tahoe Regional Planning Agency. The project was initiated prior to 2005, and was designed and planned through a collaborative, multi-agency and professional consultant supported process that involved several design iterations and substantive stakeholder input.

Ultimately, the land managers – the LTBMU and the California Tahoe Conservancy - are responsible for project success. As noted in *Response RW4* above and elsewhere, the LTBMU is committed to adaptively managing the restoration effort as needed into the future.

*Response RW 8:* The LTBMU has proposed to conduct additional turbidity monitoring consistent with your suggestion. The LTBMU will maintain continuous turbidity monitoring equipment upstream and downstream of the Project area for approximately 30 days during spring runoff conditions. If the continuous monitoring equipment cannot be installed due to safety considerations or physical damage to the equipment or equipment housing, the LTBMU will collect turbidity grab samples twice per day for one week during sustained spring runoff flows above 350 cfs.



# **ENCLOSURE 5**

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United States  
Department of  
Agriculture

Forest  
Service

Lake Tahoe Basin  
Management Unit

35 College Drive  
South Lake Tahoe, CA 96150  
(530) 543-2600  
(530) 543-0956 TTY

File Code: 1630/2600

Date: February 5, 2013

Lahontan Regional Water Quality Control Board  
2501 Lake Tahoe Blvd.  
South Lake Tahoe, CA 96150

Dear Chairman Jardine and Members of the Lahontan Regional Water Quality control Board:

I'm asking for your consideration and permit issuance for the Upper Truckee River Reach 5 Restoration and Utility Relocation Project.

The Upper Truckee River Project has been planned in coordination with members from the Upper Truckee River Watershed Advisory Group since 2006, in the context of the larger restoration effort occurring in the watershed from Meyers to the river's mouth at Lake Tahoe. The Reach 5 Restoration project is proposed by the USFS Lake Tahoe Basin Management Unit (LTBMU) and the California Tahoe Conservancy (CTC), who share ownership in the project area. Participating agreements between the CTC and LTBMU have been established for project planning and environmental analysis, and to identify the LTBMU as the agency responsible for implementing the Reach 5 project. LTBMU participation in the planning, development, design and implementation of the project was made possible by several Southern Nevada Public Land Management Act grants, totaling \$5,550,000. Approximately \$4 million dollars are remaining for implementation of the Reach 5 project and this money is designated exclusively for this use.

A high level of public and private coordination has gone into the analysis, review, and design of the Upper Truckee Reach 5 project beginning in 2006. This includes input from an established technical advisory group (TAG) consisting of a multi-disciplinary group of professionals from the Tahoe Regional Planning Agency, CTC, CA State Parks, City of South Lake Tahoe, US Army Corps of Engineers, CA Watershed Network, South Tahoe Public Utility District, Lahontan Regional Water Quality Control Board, CA Department of General Services and CA Department of Fish and Game.

In addition, the Draft NEPA/CEQA/TRPA environmental document was circulated for public review and comment on April 22, 2011; receiving four public comments during the draft phase. Public input was incorporated and considered in finalizing the environmental analysis with the final document released in February of 2012. The NEPA Finding of No Significant Impact and Decision Notice were signed on March 20, 2012, and the CEQA Notice of Determination was filed on March 21, 2012.

In working with our partners and regulatory agencies, it is particularly worth noting that, under the Environmental Improvement Program, restoration of the Upper Truckee River system has been a primary focus to achieve established goals for reducing sediment from stream channel



erosion to Lake Tahoe. From the Lake Tahoe TMDL Implementation Plan, the Upper Truckee River is currently estimated at 60 percent of total fine sediment loading from stream channels in the Tahoe basin. Public involvement and scientific evaluation concludes that "no action" is simply not feasible when so much is at stake in achieving improved clarity for Lake Tahoe.

Sincerely,



**NANCY J. GIBSON**  
Forest Supervisor



# **ENCLOSURE 6**

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# Upper Truckee River Reach 5 Restoration and Utility Relocation Project

USDA Forest Service, LTBMU

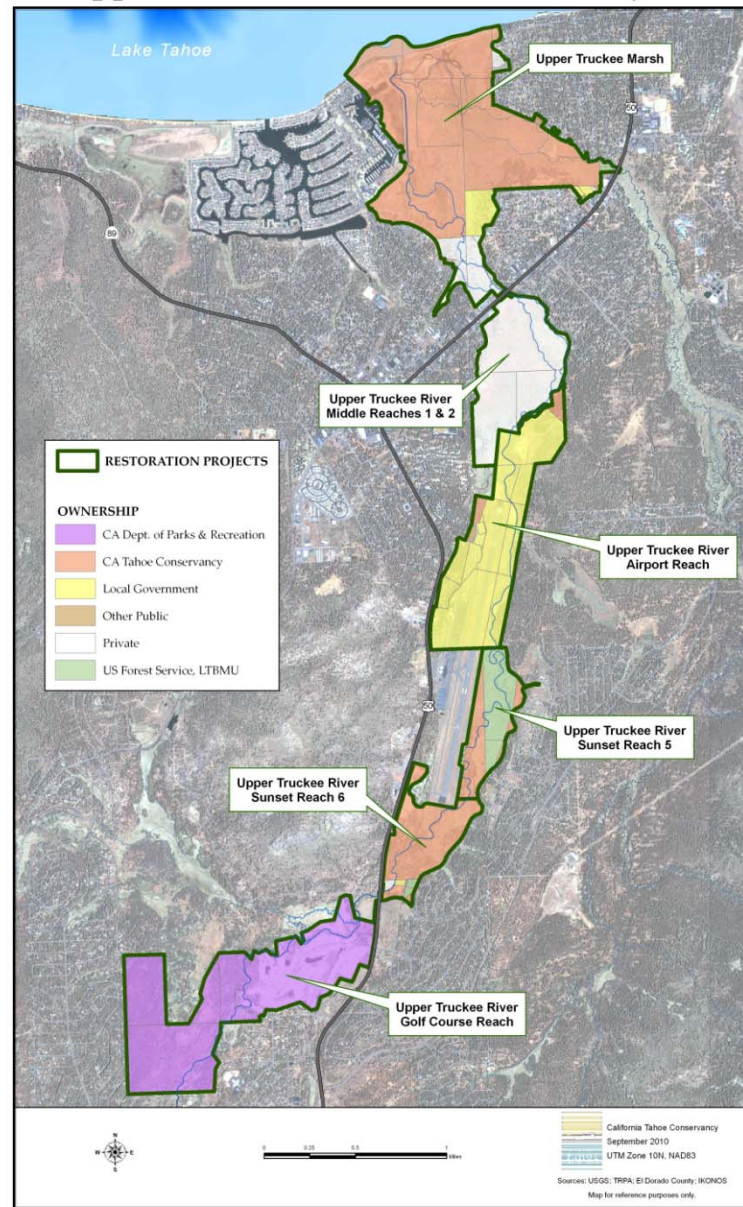
and

California Tahoe Conservancy



# Upper Truckee River Watershed Advisory Group Projects

## Upper Truckee River Restoration Projects



# Relationship to TMDL and EIP

- The Lake Tahoe TMDL Implementation Plan emphasizes stream channel restoration in the Upper Truckee river to meet load reduction targets from stream channel erosion to achieve the Clarity standard.
- TMDL Plan also recognizes the significant broader ecosystem and habitat benefits from stream channel restoration.
- Is listed on the current 5 year list of priority EIP projects (#948) and is expected to contribute to multiple TRPA Threshold benefits
  - Water quality
  - Soil conservation
  - Vegetation preservation
  - Wildlife
  - Fisheries
  - Recreation

# Project Goals and Objectives

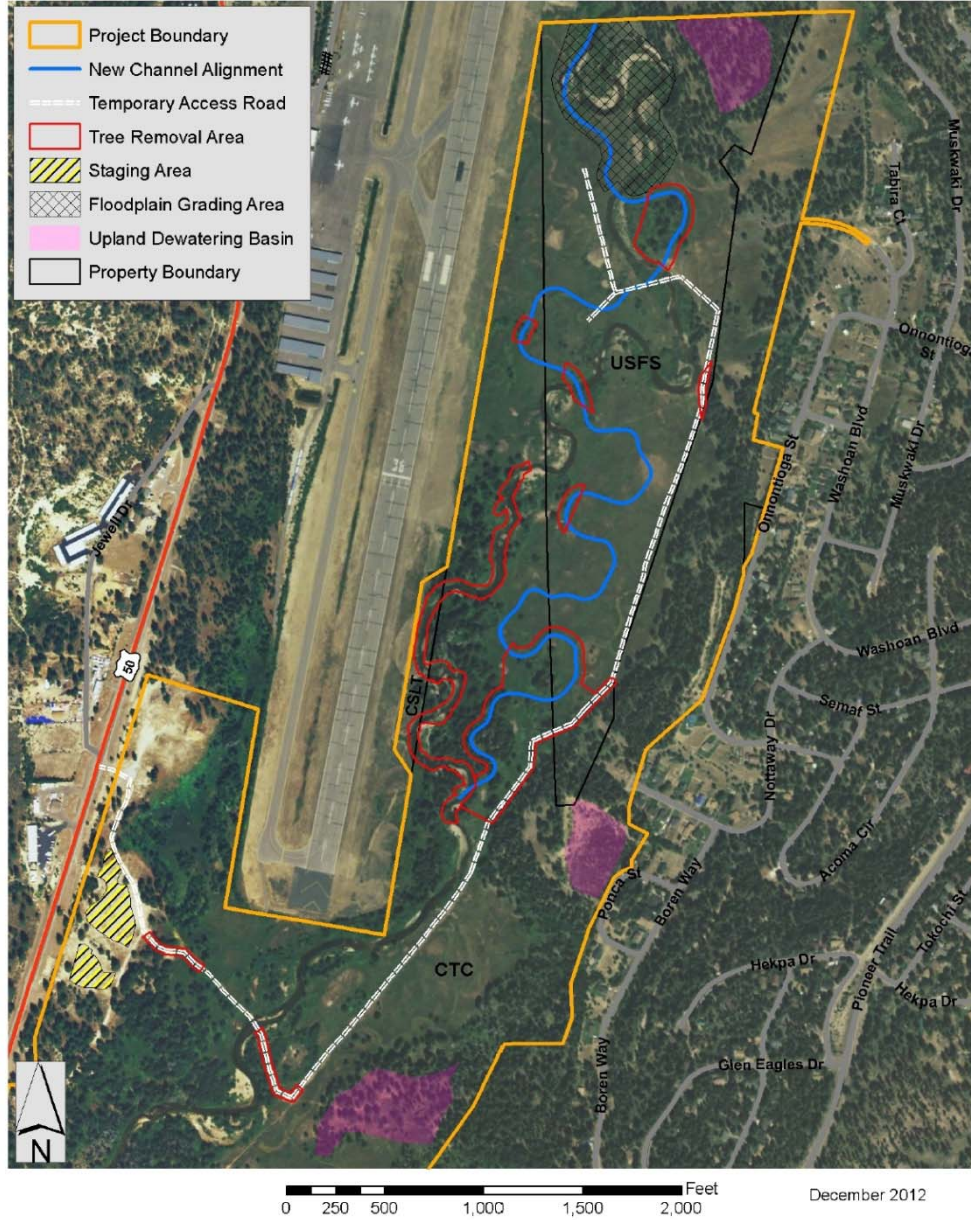
- Restore properly functioning channel and floodplain configuration based on application of geomorphic principles
  - Decrease pollutant loading by reducing bank erosion , and increasing frequency, duration, and extent of overbank flows onto the floodplain.
  - Increase groundwater levels to increase duration and extent of plant available groundwater - improving riparian and wet meadow vegetation condition, and associated terrestrial habitat.
  - Improve aquatic habitat as measured by increased depth of pools during base flow conditions and percent shade.

# Alternatives Evaluated, but not selected

- Restore existing channel in place
- Full channel reconstruction without constraints from existing utility infrastructure
- Partial channel reconstruction, partial restoration of channel in place

Extensive documentation of the comprehensive alternatives evaluation and design process is available on the LTBMU public website at:  
<http://www.fs.usda.gov/goto/ltbmu/UpperTruckeeRestoration>

# Upper Truckee River Reach 5 Restoration Project Activities





# **ENCLOSURE 7**

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Proposal for additional post-project turbidity monitoring associated with the UTR Reach 5 Restoration project:

Plan A:

Leave the housing for the continuous turbidity probes at the upstream and downstream monitoring sites in place over winter. Remove the probes from their housing at the end of the final construction season, as currently planned. In mid-April to early May (depending on flow conditions) the year following construction, reinstall the probes into their housing. Collect turbidity samples at 15 minute intervals and download the data weekly for up to 1 month during the spring runoff/snowmelt season to capture the peak flow conditions(>350 cfs) that spring.

Note: Reinstalling the probes during winter months is not feasible due to safety concerns. Therefore, this approach will capture high flows during spring snowmelt months, but not the less likely rain on snow event that could occur in the middle of winter.

Plan B:

If the housing for either of the continuous probes is damaged or lost during the preceding winter months and associated high flows during that time period, grab samples would be collected at the same location as the probes were located. In this case, grab samples would be collected upstream and/or downstream of project activities twice a day, on weekdays only, for 1 week during sustained flows of 350 cfs or greater. If flow conditions, or visual observations in the Reach 5 project area suggest that additional grab sample turbidity monitoring is warranted, this time period would be extended to a 2<sup>nd</sup> week of weekday, twice per day grab sample monitoring.